5 HEAT (Heterogeneous Environment And Testbed)

5.1 HEAT

As mentioned in the introduction, in analyzing the DAISy performance another cluster at Sandia National Laboratories, HEAT, was reviewed. The HEAT Cluster is a collection of five flavors of mainstream workstations. There are 50 workstations connected together to form HEAT, 10 each of the following; Sun SS10, SGI R4000 Indigo, DEC Alpha, HP 735, and IBM RS6000 Model 350. An SGI R4000 is currently the central machine for the testbed.

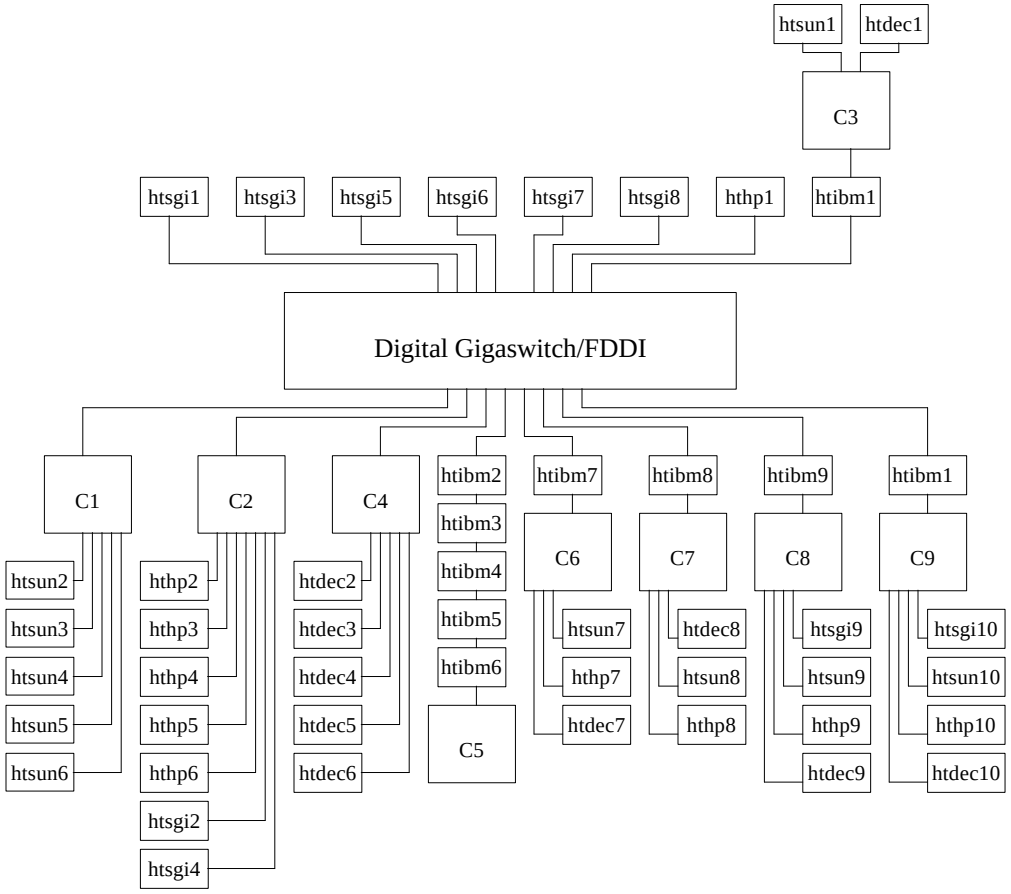

Figure 14. HEAT with Gigaswitch Configuration

Shown in Figure 14 is the current machine network configuration. The gigaswitch in the center is a bridging crossbar switch with 22 FDDI ports. Six SGI machines are directly connected to the switch. There are 9 DEC FDDI concentrators tied to the switch. The IBM RS6000 models are all connected in a daisy chain fashion. This was required for the IBM RS6000's networking to function correctly. The switch is also has a connection to a router which provides access to the Sandia Internet backbone.